

PRIORITY FOR THE ARBITRATOR

**COG 1**  
**GLOBAL CONTROL**  
-system startup and init.  
-variables management?

**COG 2**  
**INPUT MANAGEMENT**  
-uart communication  
-data pre-processing  
-data "distribution"

**COG 3**  
**SYSTEM DIAGNOSTIC**  
-communication with user  
-errors messages  
-status of the system

**COG 4**  
**COLLISION DETECTION**  
-anti-collision behavior  
-output "suggestion"

**COG 5**  
**OBJECT AVOIDANCE**  
-avoidance behavior  
-output "suggestion"

**COG 6**  
**USER COMMANDS**  
-communication from user  
-output "suggestion"

**COG 7**  
**NAVIGATION**  
-navigation behavior  
-output "suggestion"

Input PIC digital  
Input PIC analogic  
Input PIC quadrature decoder  
Input PIC etc.

RS232 network

RS232 or other comm link  
User computer

Output PIC digital  
Output PIC analogic  
Output PIC servos  
Output PIC etc.

RS232 network

**COG 8**  
**OUTPUT MANAGEMENT**  
-output arbitrator  
-output orders to PICs